

Appendix table 8-26.

**Public assessment of genetic engineering, by selected characteristics: 1985–99 (selected years)**

Characteristic	1985	1990	1995	1997	1999
Percent					
<b>All adults</b>					
Benefits strongly outweigh harmful results .....	23	20	21	19	20
Benefits slightly outweigh harmful results .....	26	27	22	23	24
Benefits equal harmful results .....	12	16	22	22	18
Harmful results slightly outweigh benefits .....	14	19	23	20	22
Harmful results strongly outweigh benefits .....	25	18	12	16	16
<b>Male</b>					
Benefits strongly outweigh harmful results .....	26	21	24	23	24
Benefits slightly outweigh harmful results .....	28	31	22	26	26
Benefits equal harmful results .....	11	14	21	20	17
Harmful results slightly outweigh benefits .....	13	18	22	17	21
Harmful results strongly outweigh benefits .....	22	16	10	14	12
<b>Female</b>					
Benefits strongly outweigh harmful results .....	19	19	18	16	16
Benefits slightly outweigh harmful results .....	25	23	22	21	22
Benefits equal harmful results .....	14	17	22	23	20
Harmful results slightly outweigh benefits .....	15	21	23	22	22
Harmful results strongly outweigh benefits .....	27	20	15	18	20
<b>Less than high school graduate</b>					
Benefits strongly outweigh harmful results .....	19	16	10	15	18
Benefits slightly outweigh harmful results .....	29	27	19	18	19
Benefits equal harmful results .....	16	25	30	23	27
Harmful results slightly outweigh benefits .....	12	17	29	30	21
Harmful results strongly outweigh benefits .....	24	15	13	14	15
<b>High school graduate</b>					
Benefits strongly outweigh harmful results .....	21	19	20	18	18
Benefits slightly outweigh harmful results .....	24	27	21	24	24
Benefits equal harmful results .....	13	12	21	21	16
Harmful results slightly outweigh benefits .....	15	21	23	18	24
Harmful results strongly outweigh benefits .....	27	21	14	19	18
<b>Baccalaureate and higher</b>					
Benefits strongly outweigh harmful results .....	33	29	35	27	27
Benefits slightly outweigh harmful results .....	29	28	30	28	28
Benefits equal harmful results .....	7	15	16	21	16
Harmful results slightly outweigh benefits .....	13	15	14	14	17
Harmful results strongly outweigh benefits .....	18	13	6	10	12
<b>Attentive public to science and technology<sup>a</sup></b>					
Benefits strongly outweigh harmful results .....	37	32	42	36	33
Benefits slightly outweigh harmful results .....	28	30	22	24	31
Benefits equal harmful results .....	9	9	16	13	8
Harmful results slightly outweigh benefits .....	12	12	13	16	19
Harmful results strongly outweigh benefits .....	14	17	7	11	9
<b>Attentive public to medical research<sup>a</sup></b>					
Benefits strongly outweigh harmful results .....	29	31	34	27	28
Benefits slightly outweigh harmful results .....	24	27	21	25	24
Benefits equal harmful results .....	12	12	17	18	12
Harmful results slightly outweigh benefits .....	11	17	18	18	23
Harmful results strongly outweigh benefits .....	24	13	9	12	13

See explanatory notes, if any, and SOURCE at end of table.

Appendix table 8-26.

**Public assessment of genetic engineering, by selected characteristics: 1985-99 (selected years)**

Characteristic	1985	1990	1995	1997	1999
<b>Sample size</b>					
<b>All adults</b> .....	2,005	2,033	2,006	2,000	1,882
Male .....	950	964	953	930	900
Female .....	1,054	1,070	1,053	1,070	982
Less than high school graduate .....	507	495	418	420	403
High school graduate .....	1,143	1,179	1,196	1,188	1,111
Baccalaureate and higher .....	349	359	392	392	368
Attentive public to science and technology <sup>a</sup> .....	235	229	195	288	216
Attentive public to medical research <sup>a</sup> .....	349	337	310	377	301

NOTES: In 1985, the question was worded, "Some persons have argued that the creation of new life forms through genetic engineering constitutes a serious risk, while other persons have argued that this research may yield major benefits for society. In your opinion, are the risks of genetic engineering greater than the benefits, or are the benefits of genetic engineering research greater than the risks? Would you say that the benefits are substantially greater than the risks, or only slightly greater than the risks? Would you say that the risks are substantially greater than the benefits or only slightly greater than the benefits?" In 1990, the question was worded, "Some persons have argued that the creation of new life forms through genetic engineering research constitutes a serious risk, while other persons have argued that this research may yield major benefits for society. In your opinion, are the risks of genetic engineering research greater than its benefits, or are the benefits of genetic engineering research greater than its risks? Would you say that the benefits have substantially exceeded the risks or only slightly exceeded the risks? Would you say that the risks have substantially exceeded the benefits or only slightly exceeded the benefits?" In 1995, the question was worded, "Some persons have argued that the creation of new life forms through genetic engineering research constitutes a serious risk, while other persons have argued that this research may yield major benefits for society. In your opinion, have the benefits of genetic engineering research outweighed the harmful results, or have the harmful results of genetic engineering research been greater than its benefits? Would you say that the balance has been strongly in favor of beneficial results or only slightly? Would you say that the balance has been strongly in favor of harmful results or only slightly?" In 1997 and 1999, one-half of the respondents were asked the question used in 1995. The other one-half were asked: "Some persons have argued that the modification of existing life forms through genetic engineering research constitutes a serious risk, while other persons have argued that this research may yield major benefits for society. In your opinion, have the benefits of engineering research outweighed the harmful results, or have the harmful results of genetic engineering research been greater than its benefits? Would you say that the balance has been strongly in favor of beneficial results or only slightly? Would you say that the balance has been strongly in favor of harmful results or only slightly?" Percentages may not total 100 because of rounding.

<sup>a</sup>To be classified as attentive to a given policy area, an individual must indicate that he or she is "very interested" in that issue area, report that he or she is "very well informed" about it, and be a regular reader of a daily newspaper or relevant national magazine. Citizens who report that they are "very interested" in an issue area, but who do not think that they are "very well informed" about it, are classified as the "interested public." All other individuals are classified as members of the "residual public" for that issue area. The attentive public for science and technology combines the attentive public for new scientific discoveries and the attentive public for new inventions and technologies. Any individual who is not attentive to either of those issues but who is a member of the interested public for at least one of those issues is classified as a member of the interested public for science and technology. All other individuals are classified as members of the residual public for science and technology.

SOURCES: National Science Foundation, Division of Science Resource Studies (NSF/SRS), *NSF Survey of Public Attitudes Toward and Understanding of Science and Technology, 1999* (and earlier years). For a complete set of data from the survey, see J.D. Miller and L. Kimmel, *Public Attitudes Toward Science and Technology, 1979-1999, Integrated Codebook* (Chicago: International Center for the Advancement of Scientific Literacy, Chicago Academy of Sciences, 1999); and unpublished tabulations.

See figures 8-12 and 8-13 in Volume 1.